17681 U.S.PTO 121103

PTO/SB/05 (08-03)
Approved for use through 07/31/2006. OMB 0651-0032
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.	22-0177
First Inventor	Harvey L. Berger
Title	See 1 in Addendum
Express Mail Label No.	ET837519590US

19270 U.S.PTO 10/733506 121103

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO: **Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria VA 22313-1450**

1. [X] Fee Transmittal Form (e.g., PTO/SB/17) *(Submit an original and a duplicate for fee processing)*
2. [] Applicant claims small entity status. See 37 CFR 1.27.
3. [X] Specification [*Total Pages* 11] *(preferred arrangement set forth below)*
 - Descriptive title of the invention
 - Cross Reference to Related Applications
 - Statement Regarding Fed sponsored R & D
 - Reference to sequence listing, a table, or a computer program listing appendix
 - Background of the Invention
 - Brief Summary of the Invention
 - Brief Description of the Drawings *(if filed)*
 - Detailed Description
 - Claim(s)
 - Abstract of the Disclosure
4. [X] Drawing(s) (*35 U.S.C. 113*) [*Total Sheets* 1]
5. Oath or Declaration [*Total Sheets* 2]
 a. [X] Newly executed (original or copy)
 b. [] Copy from a prior application (37 CFR 1.63(d)) *(for continuation/divisional with Box 18 completed)*
 i. [] DELETION OF INVENTOR(S) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).
6. [] Application Data Sheet. See 37 CFR 1.76
7. [] CD-ROM or CD-R in duplicate, large table or Computer Program *(Appendix)*
8. Nucleotide and/or Amino Acid Sequence Submission *(if applicable, all necessary)*
 a. [] Computer Readable Form (CRF)
 b. Specification Sequence Listing on:
 i. [] CD-ROM or CD-R (2 copies); or
 ii. [] Paper
 c. [] Statements verifying identity of above copies

ACCOMPANYING APPLICATION PARTS

9. [X] Assignment Papers (cover sheet & document(s))
10. [X] 37 CFR 3.73(b) Statement *(when there is an assignee)* [] Power of Attorney
11. [] English Translation Document *(if applicable)*
12. [] Information Disclosure Statement (IDS)/PTO-1499 [] Copies of IDS Citations
13. [] Preliminary Amendment
14. [X] Return Receipt Postcard (MPEP 503) *(Should be specifically itemized)*
15. [] Certified Copy of Priority Document(s) *(if foreign priority is claimed)*
16. [] Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. [] Other:

18. If a CONTINUING APPLICATION, *check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76:*

[] Continuation [] Divisional [] Continuation-in-part (CIP) of prior application No.:

Prior application information: *Examiner* _____ *Art Unit:* _____

For CONTINUATION OF DIVISIONAL APPS only; The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

19. CORRESPONDENCE ADDRESS

[] Customer Number: [] *OR* [X] Correspondence address below

Name	Connie M. Thousand, Northrop Grumman Space & Mission Systems Corp.				
Address	Space Technology One Space Park, Bldg. E1/2041				
City	Redondo Beach	*State*	CA	*Zip Code*	90278
Country		*Telephone*	310-813-1550	*Fax*	310-812-2687

Name (Print/Type)	Connie M. Thousand	*Registration No. (Attorney/Agent)*	43,191
Signature	Connie Thousand	*Date*	12/11/2003

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Addendum

1. METHOD AND APPARATUS FOR REDUCING DATA RATE TRANSMITTED IN A BEAM WITHOUT AFFECTING ITS POWER FLUX DENSITY

Practitioner's Docket No. 22-0177 *PATENT*

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Harvey L. Berger and Stuart T. Linsky

Application No.: Group No.: N/A
Filed: December 11, 2003 Examiner: Unassigned
For: METHOD AND APPARATUS FOR REDUCING DATA RATE TRANSMITTED IN A BEAM WITHOUT AFFECTING ITS POWER FLUX DENSITY

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

EXPRESS MAIL CERTIFICATE

"Express Mail" label number ET837519590US
Date of Deposit 12/11/2003

I hereby state that the following attached papers or fees

1. Utility Patent Application Transmittal (2pgs.)
2. Fee Transmittal in duplicate
3. Patent Application (11pgs.) Specif. 7pgs., Claims 3pgs. (8 Claims), Abstract 1pg.
4. 1 Sheet Formal Drawings (Figures 1-2)
5. Declaration (3pgs.)
6. Assignment (1pg.) w/PTO-1595 in duplicate

are being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. § 1.10, on the date indicated above and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Lorna L. Schott

Signature of person mailing paper or fee

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FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 810.00

Complete if Known	
Application Number	
Filing Date	December 11, 2003
First Named Inventor	Harvey L. Berger
Examiner Name	Unassigned
Art Unit	N/A
Attorney Docket No.	22-0177

METHOD OF PAYMENT *(check all that apply)*

☐ Check ☐ Credit card ☐ Money Order ☐ Other ☐ None

☒ Deposit Account:

Deposit Account Number: 14-1325

Deposit Account Name: Northrop Grumman Corporation

The Director is authorized to: *(check all that apply)*

☒ Charge fee(s) indicated below ☒ Credit any overpayments

☒ Charge any additional fee(s) or any underpayment of fee(s)

☐ Charge fee(s) indicated below, **except for the filing fee** to the above-identified deposit account.

FEE CALCULATION

1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	770.00
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) ($) 770.00

2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE

	Extra Claims		Fee from below	Fee Paid
Total Claims	8	-20** =		X =
Independent Claims	2	- 3** =		X =
Multiple Dependent				=

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) ($)

***or number previously paid, if greater; For Reissues, see above*

FEE CALCULATION (continued)

3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee ($)	Small Entity Fee Code	Small Entity Fee ($)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for *ex parte* reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	
1253	950	2253	475	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1,005	Extension for reply within fifth month	
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CFR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	40.00
1809	770	2809	385	Filing a submission after final rejection (37 CFR 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR 1.129(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) _____

*Reduced by Basic Filing Fee Paid

SUBTOTAL (3) ($) 40.00

SUBMITTED BY (Complete *(if applicable)*)

Name (Print/Type)	Connie M. Thousand	*Registration No. (Attorney/Agent)*	43,191	*Telephone*	310-813-1550
Signature	Connie Thousand			*Date*	11-Dec-2003

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card inf rmation and authorization n PTO-2038.

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